

IN THE CLAIMS:

In Claim 1, line 13, after "minimum" insert -- by adjusting a force of each of said rotators that are in contact with said ring --.

In Claim 1, line 13, after "and to" delete -- independently--.

In Claim 1, line 13, after "between" insert -- each of --.

In Claim 1, line 14, after "ring" insert -- independently--.

In Claim 13, line 16, after "controller" insert -- and using said controller to adjust a force of said rotators that are in contact with said ring --.

In Claim 14, line 2, after "adjust" delete -- a force of said rotators that are in contact with said ring and --.

In Claim 14, line 3, after "by said rotators" delete -- , and using said controller to adjust one or more of a pitch of said turbine, a yaw position of said turbine, and applying brakes on said turbine in response to changing wind conditions -- and insert -- that are in contact with said ring --.

In Claim 15, line 4, after "with said ring" delete -- with -- and insert -- and to adjust one or more of said pitch of said blades, a yaw position of said turbine, and the application or release of brakes on said turbine in response to --.

In Claim 16, line 14, after "minimum" insert -- by adjusting a force of each of said rotators that are in contact with said ring --.

Insert new Claims 21, 22, and 23.

WE CLAIM:

1. CURRENTLY AMENDED A turbine powered by wind comprising a rotor on a shaft, said rotor having blades extending outward therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism to change a pitch of said blades, said shaft having a ring coricentrally mounted thereon separately from said blades, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of said turbine when a velocity of said wind exceeds a predetermined minimum by adjusting a force of each of said rotators that are in contact with said ring and to ~~independently~~ control each contact between each of said rotators and said ring independently.
2. ORIGINAL A turbine as claimed in Claim 1 wherein said rotor has a hub thereon located between said shaft and said blades.
3. ORIGINAL A turbine as claimed in Claim 2 wherein each blade has a post extending outward from said hub with a blade-shaped portion mounted on an outer portion of said post.
4. ORIGINAL A turbine as claimed in Claim 1 wherein said ring has a plurality of spokes extending outward from a central portion thereof to support said ring.
5. ORIGINAL A turbine as claimed in any one of Claims 1, 2 or 4 wherein there are three blades mounted equidistant from one another on said turbine.
6. ORIGINAL A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring has a surface extending parallel to a surface of said shaft and the rotators are tires.
7. ORIGINAL A turbine as claimed in any one of Claims 1, 2 or 4 wherein said rotators are one selected from the group of tires, metal wheels and gears.

8. PREVIOUSLY PRESENTED A turbine as claimed in any one of Claims 1, 2 or 3 wherein said ring is a first gear located on a periphery of a plate that is concentrically mounted on said shaft and said rotators are second gears that intermesh with said first gear.
9. ORIGINAL A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring is made from metal and said rotators are metal wheels.
10. ORIGINAL A turbine as claimed in any one of Claims 1, 2 or 4 wherein said controller is connected to control brakes for said turbine.
11. ORIGINAL A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring has a significantly smaller diameter than a circumference through tips of said blades.
12. PREVIOUSLY PRESENTED A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring has a plate with a surface thereon extending parallel to a surface of said shaft, said surface of said plate providing a contact surface for said rotators.
13. CURRENTLY AMENDED A method of operating a turbine powered by wind, said turbine having a rotor on a shaft, said rotor having blades extending outwards therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism, said shaft having a ring concentrically mounted thereon separately from said blades, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of rotation of said turbine when velocity of said wind exceeds a predetermined minimum and to independently control each contact between said rotators and said ring, said method comprising controlling said speed with varying wind conditions as said blades are rotating by adjusting a number of rotators that are in contact with said ring using said controller and using said controller to adjust a force of said rotators that are in contact with said ring.

14. CURRENTLY AMENDED A method as claimed in Claim 13 including the steps of controlling said speed by using said controller to adjust ~~a force of said rotators that are in contact with said ring~~ and a number of generators that are driven by said rotators that are in contact with said ring, and ~~using said controller to adjust one or more of a pitch of said turbine, a yaw position of said turbine, and applying brakes on said turbine in response to changing wind conditions.~~

15. CURRENTLY AMENDED A method as claimed in Claim 14 including the steps of using said controller to constantly monitor said turbine and said wind conditions and changing said number of rotators in contact with said ring and a force of each rotor in contact with said ring with and to adjust one or more of said pitch of said blades, a yaw position of said turbine, and the application or release of brakes on said turbine in response to changing wind conditions.

16. CURRENTLY AMENDED A turbine powered by wind comprising a rotor on a shaft, said rotor having blades extending outward therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism to change a pitch of said blades, said shaft having a ring concentrically mounted thereon, said ring being a first gear located on a periphery of a plate that is concentrically mounted on said shaft and said rotators are second gears that intermesh with said first gear, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of said turbine when a velocity of said wind exceeds a predetermined minimum by adjusting a force of each of said rotators that are in contact with said ring and to independently control each contact between said rotators and said ring.

17. PREVIOUSLY PRESENTED A wind turbine as claimed in Claim 16 wherein said rotor has a hub thereon rotated between said shaft and said blades.

18. PREVIOUSLY PRESENTED A wind turbine as claimed in Claim 17 wherein each blade has a post extending outward from said hub with a blade-shaped portion mounted on an outer portion of said post.

19. PREVIOUSLY PRESENTED A wind turbine as claimed in Claim 16 wherein said ring has a plurality of spokes extending outward from a central portion thereof to support said ring.

20. PREVIOUSLY PRESENTED A wind turbine as claimed in Claim 18 wherein said rotators are tires.

21. NEW A turbine powered by wind comprising a rotor on a shaft, said rotor having blades extending outward therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism to change a pitch of said blades, said shaft having a ring concentrically mounted thereon separately from said blades, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of said turbine when a velocity of said wind exceeds a predetermined minimum by adjusting a force of each of said rotators that are in contact with said ring.

22. NEW A turbine as claimed in Claim 21 wherein said controller is connected to control each contact between each of said rotators and said ring independently and to control the speed of said turbine by controlling a number of rotators that are in contact with said ring.

23. NEW A turbine as claimed in Claim 22 wherein said controller is connected to control said speed of said turbine by adjusting one or more of said pitch of said blades, a yaw position and applying or releasing brakes on said turbine in response to changing wind conditions.

WE CLAIM:

1. A turbine powered by wind comprising a rotor on a shaft, said rotor having blades extending outward therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism to change a pitch of said blades, said shaft having a ring concentrically mounted thereon separately from said blades, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of said turbine when a velocity of said wind exceeds a predetermined minimum by adjusting a force of each of said rotators that are in contact with said ring and to control each contact between each of said rotators and said ring independently.
2. A turbine as claimed in Claim 1 wherein said rotor has a hub thereon located between said shaft and said blades.
3. A turbine as claimed in Claim 2 wherein each blade has a post extending outward from said hub with a blade-shaped portion mounted on an outer portion of said post.
4. A turbine as claimed in Claim 1 wherein said ring has a plurality of spokes extending outward from a central portion thereof to support said ring.
5. A turbine as claimed in any one of Claims 1, 2 or 4 wherein there are three blades mounted equidistant from one another on said turbine.
6. A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring has a surface extending parallel to a surface of said shaft and the rotators are tires.
7. A turbine as claimed in any one of Claims 1, 2 or 4 wherein said rotators are one selected from the group of tires, metal wheels and gears.
8. A turbine as claimed in any one of Claims 1, 2 or 3 wherein said ring is a first gear located on a periphery of a plate that is concentrically mounted on said shaft and said rotators are second gears that intermesh with said first gear.

9. A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring is made from metal and said rotators are metal wheels.
10. A turbine as claimed in any one of Claims 1, 2 or 4 wherein said controller is connected to control brakes for said turbine.
11. A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring has a significantly smaller diameter than a circumference through tips of said blades.
12. A turbine as claimed in any one of Claims 1, 2 or 4 wherein said ring has a plate with a surface thereon extending parallel to a surface of said shaft, said surface of said plate providing a contact surface for said rotators.
13. A method of operating a turbine powered by wind, said turbine having a rotor on a shaft, said rotor having blades extending outwards therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism, said shaft having a ring concentrically mounted thereon separately from said blades, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of rotation of said turbine when velocity of said wind exceeds a predetermined minimum and to independently control each contact between said rotators and said ring, said method comprising controlling said speed with varying wind conditions as said blades are rotating by adjusting a number of rotators that are in contact with said ring using said controller and using said controller to adjust a force of said rotators that are in contact with said ring.
14. A method as claimed in Claim 13 including the steps of controlling said speed by using said controller to adjust a number of generators that are driven by said rotators that are in contact with said ring.
15. A method as claimed in Claim 14 including the steps of using said controller to constantly monitor said turbine and said wind conditions and changing said number of rotators in contact with said ring and a force of each rotator in contact with said ring and

to adjust one or more of said pitch of said blades, a yaw position of said turbine, and the application or release of brakes on said turbine in response to changing wind conditions.

16. A turbine powered by wind comprising a rotor on a shaft, said rotor having blades extending outward therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism to change a pitch of said blades, said shaft having a ring concentrically mounted thereon, said ring being a first gear located on a periphery of a plate that is concentrically mounted on said shaft and said rotators are second gears that intermesh with said first gear, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of said turbine when a velocity of said wind exceeds a predetermined minimum by adjusting a force of each of said rotators that are in contact with said ring and to independently control each contact between said rotators and said ring.

17. A wind turbine as claimed in Claim 16 wherein said rotor has a hub thereon rotated between said shaft and said blades.

18. A wind turbine as claimed in Claim 17 wherein each blade has a post extending outward from said hub with a blade-shaped portion mounted on an outer portion of said post.

19. A wind turbine as claimed in Claim 16 wherein said ring has a plurality of spokes extending outward from a central portion thereof to support said ring.

20. A wind turbine as claimed in Claim 18 wherein said rotators are tires.

21. A turbine powered by wind comprising a rotor on a shaft, said rotor having blades extending outward therefrom, said blades being shaped to rotate said shaft when a velocity of said wind exceeds a predetermined minimum, said shaft being rotatably supported on a support that moves said blades in a yaw movement into and out of said wind as said wind changes direction, said turbine having a pitch adjustment mechanism to change a pitch of



said blades, said shaft having a ring concentrically mounted thereon separately from said blades, said ring being longitudinally offset along said shaft from said blades, a plurality of rotators mounted to removably contact said ring, said rotators being connected to drive energy producing equipment, said rotators being constructed to rotate with said ring when said rotators are in contact therewith, thereby driving said energy producing equipment when said wind rotates said blades, a controller connected to control a speed of said turbine when a velocity of said wind exceeds a predetermined minimum by adjusting a force of each of said rotators that are in contact with said ring.

22. A turbine as claimed in Claim 21 wherein said controller is connected to control each contact between each of said rotators and said ring independently and to control the speed of said turbine by controlling a number of rotators that are in contact with said ring.

23. A turbine as claimed in Claim 22 wherein said controller is connected to control said speed of said turbine by adjusting one or more of said pitch of said blades, a yaw position and applying or releasing brakes on said turbine in response to changing wind conditions.